

PAPERS READ BEFORE THE SOCIETY FROM MARCH 1894  
TO JANUARY 1895.

1894

Mar. 9. A seconds contact-maker for astronomical clocks.  
H. C. Russell.

Brilliant detonating fireball of 1894 January 25.  
W. F. Denning.

Remarks upon Mr. Stone's corrections to the measure of time since 1864. Professor S. Newcomb.

Note on the star  $DM + 27^{\circ}725$ . A. M. W. Downing.

On the proper motion of stars in the Dumbbell Nebula.  
A. A. Rambaut and W. E. Wilson.

Note on star corrections in N.P.D. W. E. Cooke.

On star corrections. Professor H. H. Turner.

Description of a perfectly achromatic refractor. H. D. Taylor.

Results of micrometer measures of double stars with the  $12\frac{3}{4}$ -inch Merz refractor at the Royal Observatory, Greenwich, during the year 1893. Communicated by the Astronomer Royal.

New orbit of  $9 Argus$ ,  $\beta 101$ . Professor S. Glasenapp.

Apr. 13. Note on Professor Newcomb's remarks upon Mr. Stone's proposed corrections to the measure of time. E. J. Stone.

Occultation of  $\alpha Virginis$  observed at Dunsink, 1894 March 22. Professor A. A. Rambaut.

Photograph of the cluster M. 46, and of the nebula  $H$  IV.  $39 Argus$ . Isaac Roberts.

Photograph of a "new" spiral nebula in *Perseus*. Isaac Roberts.

Photograph of the nebula  $H$  I. 156 *Persei*. Isaac Roberts.

The star cluster 3315. H. C. Russell.

Remarks on the best method of determining the positions of the planets by observation. David Gill.

Observations of Comet  $\alpha$  1894 (Denning), made at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.

Observations of Comet  $\alpha$  1894 (Denning), made at the Liverpool Observatory. W. E. Plummer.

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1894 Ephemeris for physical observations of *Mars*, 1894.  
 April 13. A. Marth.

An experiment with a  $12\frac{1}{2}$ -inch refractor, whereby the light lost through the secondary spectrum is separated out and rendered approximately measurable. H. D. Taylor.

Note on some photographs taken with a visual telescope. H. F. Newall.

On graduating wedges. Captain W. de W. Abney.

May 11. Note on the computation of the brightness of the planets, with some ephemerides for observations of the brightness of *Mercury*. A. Marth.

Note on the red spot on *Jupiter*. Joseph Gledhill.

Observations of the phenomena of *Jupiter's* satellites at Bermerside Observatory, Halifax, in the years 1892 and 1893. Joseph Gledhill.

Photograph of the nebulae M. 78 and H<sub>o</sub> IV. 36 *Orionis*. Isaac Roberts.

Photograph of the nebula M. 74 *Piscium*. Isaac Roberts.

Two questions on Mr. Stone's proposed correction to the measure of time. Professor S. Newcomb.

The effect of personality in observations of the Sun's right ascension on the determination of the position of the ecliptic. F. W. Dyson and W. G. Thackeray.

On some possible improvements in meridian and extra-meridian observing. Professor H. H. Turner.

Note on the solar eclipse of 1598. J. L. E. Dreyer.

Note on the proper motion of the star L L 38239. J. L. E. Dreyer.

Differences of R.A. and N.P.D. of *Uranus* and 8 *Librae* and a *Librae* about the time of the conjunction in 1894 April, observed with the transit-circle at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.

Reply to Professor Newcomb's two questions on the proposed correction to the measure of time. E. J. Stone.

A new variable star of Type IV. Rev. T. E. Espin.

On the dimensions of *Saturn's* disc. Hermann Struve.

Observations of Comet b 1894 (Gale), made at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.

June 8. Note on the lunar theory. Professor E. W. Brown.

The discovery of comets. W. F. Denning.

Photograph of the cluster H<sub>o</sub> VI. 37 *Argus*. Isaac Roberts.

Photograph of the nebulae H<sub>o</sub> V. 42 and H<sub>o</sub> I. 176, 177 *Comæ Berenices*. Isaac Roberts.

1894. Photograph of the nebulae M. 65, 66, and H. V. 8 *Leonis*.  
 June 8. Isaac Roberts.  
 Note on the variable star U *Orionis*. Lieutenant-Colonel  
 E. E. Markwick.  
 Comet  $b$  1894 (Gale), observed at Sydney Observatory.  
 H. C. Russell.  
 Orbit elements of Comet  $b$  1894 (Gale). John Tebbutt.  
 Note on the star B.A.C. 5255 = Brisbane 5525.  
 A. M. W. Downing.  
 On two distribution maps of the nebulae and clusters in  
 Dr. Dreyer's Catalogue of 1888. Sidney Waters.  
 Motions of fireballs and shooting stars relatively to the  
 earth. W. F. Denning.  
 On the semi-annual variation of meteors. G. C.  
 Bompas.  
 On the orbit of O $\Sigma$  82. J. E. Gore.  
 Remarks on Dr. Roberts's photographs of star clusters.  
 E. B. Knobel.  
 On some points connected with the integration of the  
 differential equations of the relative motions of  
 material systems. E. J. Stone.  
 Note on the distribution of the stars generally used for  
 the determination of clock-error. E. J. Stone.  
 Ephemeris of the satellites of Mars, 1894. A. Marth.  
 Ephemeris for physical observations of Jupiter, 1894-95.  
 A. Marth.  
 Some measures of photographs of the *Pleiades* at the  
 Oxford University Observatory. Professor H. H.  
 Turner.  
 On the formation of photographic star-discs. H. F.  
 Newall.  
 On the R - D discordance. Professor H. H. Turner  
 and W. G. Thackeray.  
 Observations of Comet Gale ( $b$  1894), made at the  
 Royal Observatory, Greenwich. Communicated by  
 the Astronomer Royal.  
 Observations of Comet Gale, made at the Cambridge  
 Observatory with the Northumberland Equatorial  
 and square bar micrometer. Communicated by Sir  
 R. S. Ball.  
 Nov. 9. Note on Comet Gale ( $b$  1894). W. F. Gale.  
 Observations of Comet  $b$  1894 (Gale), made at the  
 Cambridge Observatory. Communicated by Sir R. S.  
 Ball.  
 Observations of Comet  $b$  1894 (Gale), made at the  
 Royal Observatory, Cape of Good Hope. Communicated  
 by Dr. Gill.  
 Observations of Comet  $b$  1894 (Gale), made at the  
 Royal Observatory, Greenwich. Communicated by  
 the Astronomer Royal.

1894 Micrometrical measures of the diameters of *Ceres*, Nov. 9. *Pallas*, and *Vesta*, made with the 36-inch refractor of the Lick Observatory. E. E. Barnard.

On the proper motions of Groombridge, 1172, W.B. (2) XII. 740-1, W.B. XII. 632. A. C. D. Crommelin.

Ephemeris for physical observations of *Jupiter*, 1894-95 (concluded). A. Marth.

Note on Professor Turner's paper on the reduction of measures of photographic plates. F. W. Dyson.

Note on stars suitable for the determination of clock-errors. A. M. W. Downing.

Data for computing the positions of the satellites of *Jupiter*, 1894-95. A. Marth.

Note on the lunar theory. Professor E. W. Brown.

On the computation of star-corrections. W. H. Finlay.

Photograph of the nebulae H I. S<sub>4</sub>; h 1442; and H II. 344 *Comæ Berenicis*. Isaac Roberts.

Photograph of the nebulae H I. 143 and II. 536 *Virginis*. Isaac Roberts.

Comparison of the Pulkowa Catalogue (1885) with the Greenwich Ten-Year (1880) and Five-Year (1890) Catalogues. W. G. Thackeray.

Note on the binary star  $\kappa$  *Pegasi* (3989). T. Lewis.

On the orbit of  $\eta$  *Cassiopeia* ( $\Sigma$  60). T. Lewis.

Note on solar observations at Stonyhurst College Observatory. Rev. W. Sidgreaves.

Note on the latitude of the Royal Observatory, Cape of Good Hope. David Gill.

Preliminary note on the position of the Liverpool Observatory. W. E. Plummer.

Observations of Comet II. 1894 (Gale), made at the Liverpool Observatory. W. E. Plummer.

On the rotation and mechanical state of the Sun. R. A. Sampson.

On the effect of atmospheric dispersion on the position of a star. Professor A. A. Rambaut.

Note on Mr. Stone's theory of the measure of time. Professor S. Newcomb.

A comparison between the results of the Radcliffe Catalogue of stars (1890) and the Greenwich Five-Year Catalogue (1890). E. J. Stone.

Dec. 14. The annular eclipse of the Sun, 1894 April 6, and the solar eclipse of 1894 Sept. 29. C. Michie Smith.

The solar eclipse of 1894 Sept. 29. Captain H. G. Thomas.

Results of micrometer-comparisons of *Uranus* and *a Librae*. John Tebbutt.

Observations of the transit of *Mercury*, 1894 Nov. 10, made at Grahamstown, Cape of Good Hope. L. A. Eddie.

1894 Observations of the transit of *Mercury*, 1894 Nov. 10.  
 Dec. 14. Lieutenant Basil Taylor.  
 On the proper motion of three stars in the constellation *Ophiuchus*. W. T. Lynn.  
 On the late transit of *Mercury* (1894 Nov. 10). Rev. S. J. Johnson.  
 Observations of the transit of *Mercury* on 1894 Nov. 10, at Sidmouth, Devon. A. F. Lindemann.  
 Notes on suitable stations in Norway for viewing the total solar eclipse of 1896 Aug. 8. Colonel A. Burton-Brown.  
 Observation of a daylight occultation of *Antares*. John Tebbutt.  
 Observations of *Polaris* made at the Royal Observatory, Greenwich, in the years 1836-93. W. G. Thackeray.  
 A comparison of some places of stars observed at the Sydney Observatory with the places of the same stars given in the Cape Catalogue, 1880. H. P. Hollis.  
 A re-determination of the epoch correction and mean motion for Hansen's Lunar Tables from meridian observations of the Moon, 1750-1892. E. J. Stone.  
 Note on Professor Newcomb's note in the *Monthly Notices* for Nov. 1894. E. J. Stone.  
 Account of the measurement and comparison of a set of four astrographic plates, made at the Royal Observatory, Greenwich. W. H. M. Christie and F. W. Dyson.  
 Remarks on three volumes of Sun-spot drawings presented to the Society. Rev. F. Howlett.  
 Jan. 11. Observations of the transit of *Mercury*, 1894 Nov. 10, made in New South Wales. H. C. Russell.  
 Preliminary note on the determination of terrestrial longitudes of photography. Captain E. H. Hills.  
 Mean areas and heliographic latitudes of Sun-spots in the year 1892, deduced from photographs taken at the Royal Observatory, Greenwich; at Dehra Dûn (India), and in Mauritius. Communicated by the Astronomer Royal.  
 Observations of Encke's comet made at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.  
 Observations of occultations of stars by the Moon, and of phenomena of *Jupiter*'s satellites, made at the Royal Observatory, Greenwich, in the year 1894. Communicated by the Astronomer Royal.  
 On the need and usefulness of co-operation in meridian observation. Professor T. H. Safford.  
 Index catalogue of nebulae found in the years 1888-94,

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1895 with notes and corrections to the New General  
Jan. 11. Catalogue. J. L. E. Dreyer.

On the measurement and reduction of the plates for  
the Astrographic Chart. Professor H. H. Turner.

Observations of comets Sawerthal, 1888 ; Davidson,  
1889 ; Wolf, 1891 ; Holmes, 1892 ; Rordame-  
Quénisset, 1893 ; and Encke, 1894 ; made at the  
Radcliffe Observatory, Oxford. Communicated by  
E. J. Stone.

Estimated magnitude of *Nova Aurigæ*. Communicated  
by E. J. Stone.

Preliminary note on a modified (Oblique) form of Casse-  
grain telescope. Dr. A. A. Common.